

## **EXHIBIT E**

### **ECONOMIC IMPACT/ENVIRONMENT BENEFIT ANALYSIS**

## **ECONOMIC IMPACT/ENVIRONMENTAL BENEFIT ANALYSIS**

*Answer to best of the proponent's ability, as required by APC&EC Regulation 8, Chapter 3.5*

<b>STEP 1: DETERMINATION OF ANALYSIS REQUIREMENT</b> <b>(to be included in petition to initiate rulemaking)</b>
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The Arkansas Pollution Control and Ecology Commission's (Commission) Regulation No. 8 requires the Commission to duly consider the economic impact and the environmental benefit of any rule or regulation prior to promulgation. By Executive Order 05-04, the Governor has directed that impacts to small businesses be analyzed prior to adoption of regulations. Furthermore, the Arkansas Legislative Council requires the submission of a Financial Impact Statement and Questionnaire for Filing Proposed Rules and Regulations with the Arkansas Legislative Council and Joint Interim Committee with proposed regulation changes. The following procedures are outlined to provide clarity in the requirements of these various impact statements.

1. Prepare and submit the Financial Impact Statement and Questionnaire for Filing Proposed Rules and Regulations with the Arkansas Legislative Council and Joint Interim Committee required by the Arkansas Legislative Council for all proposed rulemakings.
2. The following analysis is necessary for the Commission to consider the economic impact and environmental benefit of any proposed rule or regulation. This Economic Impact/Environmental Benefit Analysis ("Analysis") must be prepared by the proponent of the rulemaking initiated before the Commission based upon information reasonably available. If a rulemaking proposes to alter or amend an existing Commission rule, the Analysis shall be restricted to the economic impact and environmental benefits of the proposed changes. This Analysis must be included in the Petition to Initiate Rulemaking before the Commission for all regulatory changes, unless the proposed rule is exempt for one or more of the following reasons:
  - The proposed rule incorporates or adopts the language of a federal statute or regulation without substantive change;\*
  - The proposed rule incorporates or adopts the language of an Arkansas state statute or regulation without substantive change;\*
  - The proposed rule is limited to matters arising under Regulation No. 8 regarding the rules of practice or procedure before the Commission;
  - The proposed rule makes only *de minimus* changes; or
  - The proposed rule is an emergency rule that is temporary in duration.

**If the proposed rulemaking does not require the following Analysis due to one or more of the exemptions listed above, state in the Petition to Initiate Rulemaking which exemptions apply and explain specifically why each is applicable.**

*\*If a proposed rule incorporates or adopts the language of a state or federal statute or regulation but does include one or more substantive change, then the Analysis shall address only the substantive changes.*

<p style="text-align: center;"><b>STEP 2: THE ANALYSIS</b> <b>(to be included in petition to initiate rulemaking, if required)</b></p>
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**Directions for Analysis Completion:**

1. Answer all questions, unless an exemption applies, using information reasonably available.
2. List source(s) for any data used in an answer. If a response cannot be provided to any question because information is not reasonably available, describe the sources consulted or steps taken in an effort to obtain the information in question.
3. Describe any assumptions used.
4. Complete the Economic Impact Statement, if applicable, as required by E0 05-04.
5. Highlight on the attached map the boundary of the geographical area impacted by the proposed rule, unless the proposed rule applies to the entire state.

**This Analysis shall be available for public review along with the proposed rule in the public comment period. The Commission shall compile a response to comments demonstrating a reasoned evaluation of the relative economic impact and environmental benefits.**

**ARKANSAS POLLUTION CONTROL & ECOLOGY COMMISSION ECONOMIC  
IMPACT/ENVIRONMENTAL BENEFIT ANALYSIS**

**Rule Number & Title: Regulation No. 6, Regulations for State Administration of the  
National Pollutant Discharge Elimination System (NPDES)**

**Petitioner: Central Arkansas Water**

**Contact/Phone/Email: Ray F. Cox, Jr., 501-212-1290, rc Cox@wlj.com**

**Analysis Prepared by: Ray F. Cox, Jr.**

**Date Analysis Prepared: January 9, 2008**

**2A. ECONOMIC IMPACT**

1. Who will be affected economically by this proposed rule?

State: a) the specific public and/or private entities affected by this rulemaking, indicating for each category if it is a positive or negative economic effect; and b) provide the estimated number of entities affected by this proposed rule.

The proposed rule would prohibit surface discharges of wastewater, other than permitted stormwater discharges, in the Lake Maumelle Basin. There are currently no surface dischargers in the Lake Maumelle Basin. A map outlining the Lake Maumelle Basin is attached hereto as Attachment A to Exhibit E.

Sources and Assumptions: The Sources and Assumptions supporting this analysis are the supporting studies attached to the rulemaking petition as Exhibits F1 to F6.

2. What are the economic effects of the proposed rule? State: 1) the estimated increased or decreased cost for an average facility to implement the proposed rule; and 2) the estimated total cost to implement the rule.

Alternatives for wastewater treatment in the watershed include sub-surface non-discharging systems such as septic tank systems, drip-irrigation systems; or pumping the wastewater out of the watershed, where feasible. There should be no increased cost for sub-surface non-discharging wastewater systems. In fact, they are usually less expensive than surface discharging wastewater treatment plants.

3. List any fee changes imposed by this proposal and justification for each.

No fee changes are imposed.

4. What is the probable cost to ADEQ in manpower and associated resources to implement and enforce this proposed change, and what is the source of revenue supporting this proposed rule?

There should not be any additional cost to state government than that associated with existing permitting programs administered by ADEQ and the ADH.

5. Is there a known beneficial or adverse impact to any other relevant state agency to implement or enforce this proposed rule? Is there any other relevant state agency's rule that could adequately address this issue, or is this proposed rulemaking in conflict with or have any nexus to any other relevant state agency's rule? Identify state agency and/or rule.

There are no known beneficial or adverse impacts to any other relevant state agency to implement or enforce this proposed rule. No other relevant state agency's rule could adequately address this issue. This proposed rulemaking is not in conflict with nor does it have any nexus to any other relevant state agency's rule.

6. Are there any less costly, non-regulatory, or less intrusive methods that would achieve the same purpose of this proposed rule?

No such methods are known.

## **2B. ENVIRONMENTAL BENEFIT**

1. What issues affecting the environment are addressed by this proposal?

The proposed change is to prohibit discharges of wastewater other than permitted stormwater discharges into the Lake Maumelle Basin. Scientific studies, including the use of calibrated watershed and lake response models, have demonstrated that long-term surface water discharges of wastewater pose the single most serious and dominant threat to Lake Maumelle, greatly increasing the likelihood of harmful algae blooms and significantly degrading the current high level of lake water quality. The watershed and lake analysis showed that allowing surface wastewater discharges other than stormwater – even with the highest levels of treatment – would make it impossible to achieve lake water quality targets.

2. How does this proposed rule protect, enhance, or restore the natural environment for the well being of all Arkansans?

The benefits of the proposed amendment to Regulation No. 6 include 1) maintaining the high water quality in Lake Maumelle, the primary raw water source for Central Arkansas Water, which serves 398,000 people in central Arkansas, 2) minimizing or preventing the potential formation of Trihalomethanes (THM, a carcinogen regulated by the EPA) that may occur when raw water with high amounts of algae or organic matter is chlorinated and 3) preventing higher water treatment costs.

3. What detrimental effect will there be to the environment or to the public health and safety if this proposed rule is not implemented?

The consequences of taking no action would include lower water quality in Lake Maumelle due to increased algae growth in response to the higher amounts of phosphorus (a

fertilizer that promotes algae growth) and the associated risk for formation of THM and other disinfection by-products (DBPs) that have health risks and are regulated by EPA, large concentrations of algae in the raw water create taste and odor issues in the treated water, which are extremely difficult to mitigate and higher treatment costs for meeting the EPA regulated values for the THM and DBPs, and to minimize taste and order problems.

4. What risks are addressed by the proposal and to what extent are the risks anticipated to be reduced?

The risks addressed by the proposed rule change include the potential formation of Trihalomethanes, increased concentrations of algae in the raw water creating taste and odor issues in the treated water, and higher water treatment costs. In coordination with the other components of the Lake Maumelle Watershed Management Plan, the risks should be substantially eliminated.